

Conclusions: Endovascular retrieval of inferior vena cava filter is possible, even after a prolonged dwell time. Retrievable filters should have a tracking mechanism to ensure removal of the filter at appropriate time to avoid complications of a prolonged dwell time.

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Midterm Outcomes of Endovascular Treatment of TransAtlantic Inter-Society Consensus Class D Total Aortoiliac Occlusions

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Objectives: Management of TransAtlantic Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II) class D total aortoiliac occlusions is traditionally by open surgery. Advancements in stent design and tools for crossing and true lumen re-entry have made endovascular repair an option for carefully selected patients. The aim of this study was to evaluate our center's outcomes treating such lesions from an endovascular approach.

Methods: This was a retrospective review of all percutaneous interventions for TASC II type D aortoiliac occlusions performed between April 2010 and February 2012 at a single practice. Preoperative demographic data, risk factors for atherosclerosis, clinical symptoms, and postoperative follow-up were evaluated.

Results: During this time period, 10 patients underwent endovascular repair for symptomatic TASC II type D aortoiliac occlusions. Technical success was achieved in all patients by percutaneous access via bilateral femoral arteries and additional brachial access in four of 10 patients. The use of re-entry devices was necessary in seven of 10 patients. Initial aortic ICast stenting (Atrium Maquette Geringe Group), followed by ICast stents into the bilateral iliac arteries, was performed in all cases. Extension with nitinol stents to the external iliacs was routine. Average length of surgery was 166 minutes, with 171 mL contrast used. There were minor postoperative complications in four of 10 patients. No patients died ≤ 30 days of the procedure. Median length of stay was 1 day. The average follow-up was 24.5 months. Three patients were lost to follow-up. Mean preoperative Rutherford class was 3.7 and at follow-up was 2.0. Two of 10 patients required reintervention due to worsening of symptoms. Therapy failed in one patient at 19 months, and his leg became unsalvageable despite revascularization. Primary patency at follow-up was five of seven (71%), and primary assisted patency was six of seven (86%).

Conclusions: An endovascular approach to complex total aortoiliac occlusions is feasible and shows promising midterm results with effective resolution of symptoms, low mortality rates, and low lengths of stay in this small series. Technical success required frequent use of reentry devices and brachial access. Further prospective studies and longer-term follow-up are needed to confirm these initial results.

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Quantifying Excess Cost Associated with Readmission for Surgical Site Infection Following Open Vascular Procedures Involving the Lower Extremity

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Objectives: With the probable expansion of the Hospital Readmission Reduction Program to include high-risk procedures, reducing preventable readmissions is imperative. Patients undergoing vascular surgery have a high rate of unplanned 30-day readmission, with a large percentage due to surgical site infection. The objective of this study was to characterize resource utilization associated with readmission due to surgical site infection.

Methods: The American College of Surgeons National Surgical Quality Improvement Program database was used to identify patients undergoing open vascular surgery procedures involving the lower extremities at a single institution from January 2011 through June 2012. Resource utilization, represented by the institutional cost for each patient's index hospitalization as well as all unplanned 30 day readmissions, was obtained using SAP BusinessObjects. Comparisons were performed using the Student *t*-test for continuous variables and the χ^2 test for categorical variables.

Results: We identified 304 open procedures involving the lower extremities. The mean cost of index hospitalization for all procedures was $\$30,558 \pm \$29,954$. Twenty-two percent ($n = 67$) of patients were readmitted ≤ 30 days of discharge. Of those readmitted, 33% were primarily for treatment of surgical site infection. Those readmitted with surgical site infection were more likely to be diabetic (59.1% vs 33%; $P = .0133$) and have a higher body mass index (30.24 kg/m^2 vs 27.21 kg/m^2 ; $P = .0252$; Table). The mean excess cost associated with any type of readmission was $\$20,341 \pm \$24,622$ and was $\$12,592 \pm \5537 for surgical site infection.

Conclusions: Readmissions due to surgical site infection after lower extremity vascular procedures are associated with quantifiable excess cost.

Table. Patient characteristics

Variables ^a	Readmit for SSI		P value ^b
	No (n = 282)	Yes (n = 22)	
Age, years	67.57 \pm 11.56	63.64 \pm 13.88	.1313
Gender			
Female	110 (39.0)	12 (54.6)	.1521
Male	172 (61.0)	10 (45.4)	
Race			
Asian	1 (0.4)	0 (0)	.1322
African American	39 (14.4)	6 (31.6)	
White	231 (85.2)	13 (68.4)	
Smoker	143 (50.7)	8 (36.4)	.1949
Dialysis	15 (5.3)	1 (4.6)	.8756
Hypertension	225 (79.8)	20 (90.9)	.2039
Diabetes	93 (33.0)	13 (59.1)	.0133
BMI, kg/m ²	27.21 \pm 6.09	30.24 \pm 5.88	.0252
COPD	39 (13.8)	4 (18.2)	.5726
Elective surgery	174 (61.7)	12 (54.6)	.5071
OR time, hours	3.59 \pm 1.63	3.39 \pm 1.33	.6057
Wound classification			
Clean	271 (96.1)	20 (90.9)	.2004
Clean/contaminated	2 (0.7)	1 (4.6)	
Dirty/infected	9 (3.2)	1 (4.6)	
Steroid (yes)	16 (5.7)	1 (4.6)	.8244
Length of Stay	8.05 (8.94)	7.27 (7.50)	.6905
ASA class			
1	1 (0.4)	0 (0)	.8264
2	11 (3.9)	2 (9.1)	
3	152 (53.9)	11 (50.0)	
4	117 (41.5)	9 (40.9)	
5	1 (0.4)	0 (0)	

ASA, American Society of Anesthesiologists; BMI, body mass index; COPD, chronic obstructive pulmonary disease; OR, operating room; SSI, surgical site infection.

^aContinuous variables are expressed as means \pm standard deviations and categorical variables as frequency (%).

^bP values are from Student *t*-test for continuous variables and χ^2 test for categorical variables.

With continued efforts to reduce readmissions, quantifying costs associated with readmission will be critical to justify funding for preventative strategies.

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Percutaneous Retrograde Transcollateral Recanalization of the Superior Mesenteric Artery via the Celiac Artery for Acute Mesenteric Ischemia

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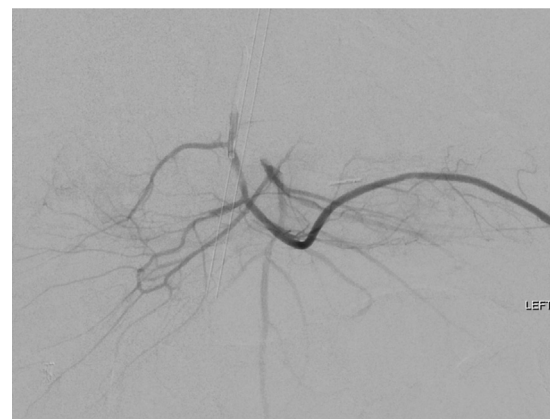


Fig 1. Selective angiogram through gastroduodenal artery demonstrating pancreaticoduodenal arcade and distal superior mesenteric artery.